

Material for Silo Building

Stave Silo the Best in Common Use

By C. H. Eckles, Professor of
Dairying, University of
Missouri.

For the last fifteen years all silos have been built round, and this is the only style recommended at present. The essential things in silo construction are to have an air tight wall, smooth on the inside so the silage can settle properly and a structure sufficiently strong to hold the enormous pressure of the silage, and durable enough so that it will not be necessary to replace it for some time. Successful silos have been built in a variety of ways of different materials, including wooden staves, concrete, wood plastered with cement stone, wood, brick, iron and tile.

The most common silo found in this state is the stave silo. This is built on the plan of the stave water tank. It is purchased ready to put together, requiring only that the foundation be made. A foundation is built of concrete. The walls should be about eight inches thick and should extend two or three feet into the ground. On this the silo is erected.

There are many types and forms of stave silos, and it is impossible to say which is best. It is preferable to use those having one piece staves. The continuous door is more convenient. Little positive evidence is at hand as to which wood is most suitable and durable for silo building. The following statement regarding the average number of years wood will remain without decay is supplied by the Bureau of Forestry, U. S. Department of Agriculture:

Species	Average number of years of life, untreated.
Cypress	14
Redwood	11
Douglas Fir	10
Yellow Pine	8
White Pine	8

The stave silo preserves the silage as well as any type in use. It is easily erected and can also be taken down if it is desired to move it. The disadvantage of this type of silo is that it gives some trouble on account of drying out, and attention must be given to keeping the hoops at the right tension. It should be fastened securely with wire cables attached to sleepers placed in the ground a short distance from the structure, otherwise it may blow over or collapse when empty. The stave silo should be expected to last from ten to fifteen years, depending upon the wood from which it is made and other conditions. Those that are made of wood treated with creosote or other suitable wood preservatives are more durable than the untreated. The cost will vary and can be easily obtained from agents. In the central part of Missouri a stave silo 16 by 32 feet will cost about \$250 at the present time. This estimate does not include the foundation. The concrete silo may be built of blocks or with solid walls. The latter is sometimes called monolithic. The solid wall structure is to be recommended as the best.

The advantages of a concrete silo are that when once properly built it is a permanent structure and is not damaged by fire or wind or drying out.

It does not preserve the silage any better than does one with a wall of wood. On the other hand, if the concrete wall is properly constructed so that the air is kept out, the silage will be preserved in perfect condition. The objections that are often raised to the concrete silo, especially by those in-



Two solid concrete silos at the dairy barn, College of Agriculture, University of Missouri.

terested in the sale of the stave silo, are that it will crack and fall down, and that furthermore it does not preserve the silage. It is quite true that both these conditions have been met with in many cases.

If the structure is properly reinforced, however, there is not the least danger of its cracking or falling down. If the walls are made of a mixture containing sufficient cement so that the wall is not too porous, the silage does not spoil. It requires some little skill to properly build a concrete silo. A farmer who has had no experience at the work should secure the assistance of someone who has had experience before attempting to build a concrete silo.

The two things to be especially regarded in building the concrete silo are to have an abundance of iron for reinforcement, and sufficient cement in the mixture to make the walls impervious to air. It is a good plan to go over the inside wall of a concrete silo each year, or at least every second year before filling, with a mixture of cement and water. The mixture should be about the consistency of whitewash. This helps to close up the pores of the wall and to exclude the air. After a concrete silo stands empty during the summer, the walls become very dry. When the moist silage is put in, the walls absorb moisture from the silage. This may result in white mould forming near the outer edge. This condition, when present, indicates that the concrete has been made too porous. The mixture should have contained a greater proportion of cement. By applying the wash of cement and water this trouble may be avoided.

THE MAKING OF BUTTER PREPARING FOR THE WHEAT

A. C. Page, College of Agriculture, University of Missouri.

Farm butter is notoriously bad. There is no denying it, much as we would like to do honor to the products of the farm. Creamery butter is the best, and the customer prefers it and pays a better price for it. Why is it so?

It is because the farmer, or the farmer's wife, or whoever attends to the buttermaking has not learned to be as careful with some certain details as the professional buttermaker in the big creamery. Yet these things are not so difficult to attend to.

It begins with the cow. The milk must be kept clean and it must therefore come from clean cows. It must be properly cared for so that it develops no bad flavors. At the creamery they put in the kind of bacteria they desire and get the flavor they want. On the farm this can be attended to as well by keeping the cream clean and at the proper temperature.

Churning has a number of details that need more care. Overchurning, making pasty, greasy butter, is perhaps the most common. The creamery stops the churn as soon as the butter is in granules the size of wheat grains, but the farmer's wife often churns until the butter is in a solid lump. This makes a difference. Overworking it is another thing that gives this greasiness. A number of such details go together to make a better product. The farm should produce the best. It is worth while, and the price that good butter, attractively put up will bring, will more than pay the difference.

Cows will soon be starting to work again for the winter. Do you know how faithful a worker the cow is? Do you realize that she works in eight hour shifts, three shifts a day? Do you know that she needs good nourishing food in order that her work may be effective? Then remember not to turn her into the stalk field this winter. She will appreciate it. The remedy is to build a silo and have canned green corn for her and the rest of the stock all winter.

A. C. Page, University of Missouri, College of Agriculture.

Careful farmers are already preparing the seed bed for the wheat that goes in this fall. One of the greatest factors that limits the production of wheat ordinarily is the poorly prepared seed bed.

Prof. M. F. Miller of the Agronomy Department of the University of Missouri ascribes the "heaving" of wheat to the looseness and cloddiness of the lower layer of the bed. If the surface is plowed and allowed to stand quite a while, then is harrowed, the top will appear to be smooth and in good condition while the part a few inches underneath will be made up of large clods and openings. These openings not only cut off the supply of water which should rise from the subsoil, but in a wet time they will fill with water and lift when a freeze comes.

The simplest remedy, and the most effective one, for this coarseness in the lower part of the seedbed, is to disk the ground thoroughly before plowing it. Then there will be no clods that cannot be reached and dealt with. Furthermore, the disked surface will plow with less horsepower, and the weeds will turn under better.

Two things then, are extremely important in preparing wheat land: One is to disk before breaking; the other is to do it soon enough so that the seedbed will have time to settle well before seeding time. The moisture will be started up and the seed will have the best kind of a start.

It is a good time to consider some kind of a water supply for the house. A pump and a kitchen sink will save many a backache, and will cost less than twenty dollars. The amount that would be saved in a single season from testing the seed corn would install a complete system as convenient and helpful as in a modern city home. The ox team was abandoned years ago in most parts, but some Missouri farmers still carry water to the house (or let their wives do it) in buckets. It is too expensive. The modern way is cheaper and prolongs life.



That's the kind—Libby's—There isn't another sliced dried beef like it. Good? It's the inside cut of the finest beef sliced to wafer thinness.

Libby's Sliced Dried Beef

stands supreme. The tasty dishes one can make with it are almost numberless. Let's see! There's creamed dried beef, and—but just try it. Then you'll know!

Always Insist on Libby's

Don't accept "a just good." From relish to roast, from condiment to conserve, the quality of Libby's Ready-to-Serve Foods is always superior. And they don't cost one whit more than the ordinary kind.

Put up in sterilized glass or tin containers

At Every Grocer

Libby, McNeill & Libby
Chicago



DAISY FLY KILLER

Harold Somers, 150 DuSable Ave., Brooklyn, N. Y.

FOR SAFETY TO THE DRIVER

Mirrors installed on Streets of English Towns Have Proved of Material Benefit.

Mirrors at street corners to provide for the drivers of vehicles a view of the cross streets have been installed in at least two towns in England. In Folkestone there is an acute angle street crossing where one corner is built up close to the curb. On this corner is placed a 24x24 inch mirror supported on gas pipe standards at such an angle that drivers of vehicles coming toward the built-up corner from either of the two opposite streets can see up the streets at right angles to their path.

The engineer in charge states that owing to the impossibility of motor-ists seeing any oncoming traffic several accidents and narrow escapes have occurred at that point. Since the mirror has been fixed he has not heard of anything approaching an accident. The damp, mist, rain or frost have no ill effect on the mirror, which is occasionally cleaned by a passing lamplighter when cleaning his lamps.

At Malmesbury, in Wiltshire, a mirror five by eight feet in size, supported on standards so that its top is 15 feet above the street, occupies an angular position at the apex of a closed right-angle curve. The engineer in charge says: "The mirror requires scarcely any cleaning; only a wipe over once in about three months."—Engineering News.

Consistent.

"Your friend is very particular about conformity in all things, isn't he?"

"Yes, indeed. When he went on his last spree the family were in mourning and he saw only black snakes."

To be sweet and clean, every woman should use Parline in sponge bathing. It eradicates perspiration and all other body odors. At drugists. 25c a box or sent postpaid on receipt of price by The Paxton Toilet Co., Boston, Mass.

Speed the Parting Guest.

Father Knickerbocker—Can't you stay a little longer?

Departing Visitor—No. Haven't a red cent left.

Father Knickerbocker—Oh! Well, good-by.

Money saves some men a lot of worry—by their not having it.

Mrs. Winslow's Soothing Syrup for Children teething, softens the gums, reduces inflammation, allays pain, cures wind colic, etc. a bottle.

HER LITTLE HAND IN HIS

Mr. Pecke's Explanation as to Reason Somewhat Dispelled the Odor of Romance.

Henne and Pecke were two henpecked married men. The other day they met, and after a few casual remarks concerning the weather, the subject of women and unfortunate husbands was—perhaps naturally—discussed. To Henne, however, suddenly came thoughts of years ago, when he was a happy bachelor, and (unconscious of what Fate had in store for him) was "walking out" a girl who was, later on, destined to bring him sorrow and misery.

Pecke, seeing a "far-away" look in his companion's eyes, inquired the meaning. Henne retorted dramatically, "I was just then thinking, old fellow, of those happy days long ago—when I used to hold that girl's hand in mine for hours—when—"

But the equally unfortunate Pecke suddenly cut his companion short by exclaiming: "Why, that's nothing! Cheer up! Do you know, only yesterday I held my wife's hand for three solid hours."

"What?" said the startled Henne.

"Yes, it's a fact," resumed Pecke, sorrowfully; "and I declare if I'd let loose she'd have killed me!"—London Tit-Bits.



HARD LUCK.



"The sense of the ridiculous," said Kate.

"Is strong in Sue—the foxy elf."

"Indeed," said Grace, "how very keenly then."

She must appreciate herself."

Expect Big Sale of Red Cross Seals.

The campaign for selling Red Cross seals this year will be carried on in practically every state and territory in the United States, and even in Porto Rico, the Canal Zone, Hawaii and Philippine Islands. No less than 100,000 volunteer agents, including department, drug and other kinds of stores, motion picture theaters, individuals, and others, will be engaged in the work. Before the sale is completed, it is expected that at least 100,000,000 seals will have been printed and distributed, besides several million posters, display cards and other forms of advertising literature.

Badly Frightened Fish.

"It was never so known before," says Rankin Dunfee, local angler, who wasn't angling on the occasion in point. "I was crossing the bridge near home swinging my lantern, for the night was dark. I heard a great splash, got down on the bank with my lantern to see the cause, and lo and behold a 16-inch fish lay floundering in the weeds. The lantern must have scared him out of the water—don't you think?"—Philadelphia Record.

Sure of Himself.

"Aren't you afraid you may become a slave to the smoking habit?"

"No. I can quit whenever I want to."

"How do you know that? Have you ever tried it?"

"No, but I've cured myself of the habit of voting for every candidate who is nominated by the political party to which I belong, and a man must have a strong will to do that."

His Rank.

Mistress—Well, I'm sorry you want to leave me, Mary, but what's your reason?

Mary keeps silent.

Mistress—Something private?

Mary (suddenly)—No, mum; please, mum, he's a lance corporal.—Illustrated Bits.

Pa's Rather Indefinite.

"Pa, what is an anachronism?"

"Oh, that's something or other smart people are always finding in Shakespeare's works. Now, run along and play."

Cole's Carbolative.

Relieves and cures itching, torturing diseases of the skin and mucous membrane. A superior Pile Cure. 25c and 50cents, by druggists. For free sample write to J. W. Cole & Co., Black River Falls, Wis.

Why?

"George, don't you think, now that your salary has been raised, we can have an automobile?"

"Oh, I suppose we can have one, if we wish, but why be so common?"

LEWIS' Single Binder gives the smoker a rich, mellow tasting cigar.

Their Place.

"Where are marital rods in pickle kept?"

"I should suggest in family jars."

NATURALLY.



His—Wagon looks so sheepish lately.

Dix—No wonder. He's raising mutt-tench whippers.

RED, ROUGH HANDS MADE SOFT AND WHITE

For red, rough, chapped and bleeding hands, dry, fissured, itching, burning, painful, and painful finger-ends, with shapeless nails, a one-night Cuticura treatment works wonders. Directions: Soak the hands, on retiring, in hot water and Cuticura Soap. Dry, anoint with Cuticura Ointment, and wear soft bandages or old, loose gloves during the night. These pure, sweet and gentle emollients preserve the hands, prevent redness, roughness and chapping, and impart in a single night that velvety softness and whiteness so much desired by women. For those whose occupations tend to injure the hands, Cuticura Soap and Cuticura Ointment are wonderful.

Cuticura Soap and Ointment sold throughout the world. Sample of each free, with 32p. Skin Book. Address post-card "Cuticura, Dept. L, Boston."

Prize Winner.

"What are these cups for?" asked a well-dressed man of a jeweler, pointing to some lovely silver cups on the counter.

"These are race cups to be given as prizes."

"If that's so, suppose you and I race for one?" And the stranger, with the cup in his hand, started, the jeweler after him. The stranger won the cup.—Keystone.

Lacks Originality.

"Bukins tells me that he has lately subscribed for a new thought magazine."

"I hope its perusal will inspire him with some new thoughts. Nobody talks about the weather more than Bukins does."

Once in a great while love's labor is lost, but more often it is misplaced.

Ivy poison quickly healed by Resinol

Ivy or oak poison, sunburn, heat rashes, insect bites, and other annoying hot weather skin-troubles are instantly relieved and quickly healed by Resinol Ointment and warm baths with Resinol Soap.

Mr. Edgar A. Norris, of Unionville, Md., writes, May 9, 1912: "Every summer I get ivy poison. I have suffered awfully, cannot sleep and almost go wild with itching and pain. The worst places get perfectly raw. I have tried dozens of remedies that had no effect. Last summer I had a severe case, and tried Resinol Ointment. I found it the very thing. It not only soothed and stopped that awful itching, but it healed rapidly. I was soon rid of the trouble."

Sample free: Resinol Soap and Resinol Ointment are also most effective for eczema, baby rashes and chaffings, bad complexion, dandruff, and falling hair. Your druggist, mail order, or for generous free samples of each, write to Dept. 105, Resinol Chem. Co., Baltimore, Md.

The Wretchedness of Constipation

Can quickly be overcome by CARTER'S LITTLE LIVER PILLS.

Purely vegetable—act surely and gently on the liver. Cure Biliousness, Headache, Dizziness, Indigestion. They do their duty. SMALL PILL, SMALL DOSE, SMALL PRICE. Genuine must bear Signature.

WATERBURY

A WONDERFUL DISCOVERY.

In this age of research and experiment, all nature is searched by the scientific method for new and improved means. Science has indeed made giant strides in the last century, and among them by the means of important discoveries. In medicine, the most important discovery of the century is the discovery of the human body, which has been used with great success in French hospitals and that it is worthy the attention of those who suffer from kidney, bladder, nervous system, chronic rheumatism, liver, skin eruptions, etc. There is no doubt, in fact, it seems evident from the big air created amongst specialists, that THERAPION is destined to revolutionize the whole of medicine. It is of course impossible to tell whether all we should like to tell them in this short article, but those who would like to know more about this remedy that has effected so much, we might almost say, a revolution, should send addressed envelopes for FREE BOOK to Dr. J. C. M. Co., 114 West 42nd St., New York, N. Y., and decide for themselves whether the New French Remedy "THERAPION" No. 1, No. 2, or No. 3 is what they require and has been coming in rain during a life of misery, suffering, ill health and unhappiness. Their name will be sent to the mail. Write to: THERAPION Co., 114 West 42nd St., New York, N. Y.

PARKER'S HAIR BALM
Cleanses and beautifies the hair. Promotes a healthy scalp. Prevents hair falling. No oil and no itching.

DEFIANCE STARCH

W. N. U., ST. LOUIS, MO. 33-1912.

900 DROPS

CASTORIA

ALCOHOL—3 PER CENT

Vegetable Preparation for Assimilating the Food and Regulating the Stomachs and Bowels of

INFANTS & CHILDREN

Promotes Digestion, Cheerfulness and Rest. Contains neither Opium, Morphine nor Mineral.

NOT NARCOTIC

Recipe of Old Dr. SAMUEL PITCHER

Pumpkin Seed - 1 lb.
Almonds - 1 lb.
Rhubarb - 1 lb.
Ginger - 1 lb.
Sassafras - 1 lb.
Cinnamon - 1 lb.
Cloves - 1 lb.
Mace - 1 lb.
Nutmeg - 1 lb.
Peppermint - 1 lb.

Perfect Remedy for Constipation, Sour Stomach, Diarrhoea, Worms, Convulsions, Feverishness and LOSS OF SLEEP.

Fac Simile Signature of **Chas. H. Pitcher**

THE CENTAUR COMPANY, NEW YORK

At 6 months old 35 Doses - 35 CENTS

Guaranteed under the Food and Drug Act.

Exact Copy of Wrapper.

CASTORIA

For Infants and Children.

The Kind You Have Always Bought Bears the Signature of

Chas. H. Pitcher

In Use For Over Thirty Years

CASTORIA

THE CENTAUR COMPANY, NEW YORK CITY.

EVERY CHILD SHOULD HAVE THE

Faultless Starch Twin Dolls

Miss Lily White and Miss Phoebe Prim.

If you will use the best starch made both of these rag dolls, each 12 1/2 inches high and ready to put on and stuff, will be sent to any address, postpaid, on receipt of 10 cents from 10-cent Faultless Starch packages, or better front of 5-cent Faultless Starch packages, and 5 cents in stamps to cover postage and packing. (If either doll will be sent on receipt of three 10-cent front or six 5-cent front and 5 cents in stamps. Out front or six 5-cent front and 5 cents in stamps. Out front or six 5-cent front and 5 cents in stamps. Out front or six 5-cent front and 5 cents in stamps. Only one ad will be accepted with each application.)

FAULTLESS STARCH CO., Kansas City, Mo.

Death Lurks In A Weak Heart

If Yours Is fluttering or weak, use "RENOVINE." Made by Van Vleet-Mansfield Drug Co., Memphis, Tenn. Price \$1.00